## PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY	PCT
То:	PCI
BARKER BRETTELL	NOTIFICATION OF TRANSMITTAL OF
138 Hagley Road	THE INTERNATIONAL SEARCH REPORT
Edgbaston	OR THE DECLARATION
Birmingham B16 9PW	
UNITED KINGDOM	(PCT RECORDS DEPT
	SEEN BY:
	AGENT:
	Date of mailing (day/month/year)
Applicable and the second of th	22/06/2004
Applicant's or agent's file reference	
JL4055	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No.	International filing date
PCT/GB 03/05308	(day/month/year) 04/12/2003
Applicant	14, 11, 1003
guona non an	
SHORT BROTHERS PLC	
1. X The applicant is hereby notified that the International Search	Report has been established and is transmitted horsevith
FIRID OF AMERICANDO STATE CONTACT AND ILLUSTRATION AND IL	
The applicant is entitled, if he so wishes, to amend the claims	of the International Application (see Rule 46):
When? The time limit for filing such amandments is a	
International Search Report; however, for more deta	ails, see the notes on the accompanying sheet.
Where? Directly to the International Bureau of WIPO	
34, chemin des Colombettes	
1211 Geneva 20, Switzerland Fascimile No.: (41-22) 740.14.35	
For more detailed instructions, see the notes on the accom	
2. The applicant is hereby notified that no International Search F Article 17(2)(a) to that effect is transmitted herewith.	Report will be established and that the declaration under
Article 17(2)(a) to that effect is transmitted herewith.	declaration under
3. With regard to the protest against payment of (an) additional	al fee(s) under Rule 40.2, the applicant is potified that
the protest together with the decision thereon has been	
applicant's request to forward the texts of both the protes	st and the decision thereon to the designated Offices
no decision has been made yet on the protest; the application	ant will be notified as soon as a decision is made
	as a cooleien is made.
4. Further action(s): The applicant is reminded of the following:	
Shortly after 18 months from the priority date, the international applies of the applicant wishes to avoid or postpone publication, a notice of	Cation will be published by the international B
If the applicant wishes to avoid or postpone publication, a notice of priority claim, must reach the International Bureau as provided in F	withdrawal of the international application, or of the
priority claim, must reach the International Bureau as provided in F completion of the technical preparations for international publication	nules 90 <i>bis</i> .1 and 90 <i>bis</i> .3, respectively, before the
Within 19 months from the priority data a demand for interest	
wishes to postpone the entry into the national phase until 30 month	s from the priority date (in some Offices area lates)
Within 20 months from the priority date, the applicant must as the second	
before all designated Offices which have not been elected in the depriority date or could not be elected because they are not bound by	emand or in a later election within 19 months from the
priority date or could not be elected because they are not bound by	Chapter II.
ame and mailing address of the International Searching Authority A	
Authority A	uthorized officer

Marie-Laure Dupont-Hüper

Form PCT/ISA/220 (July 1998)

European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 <u>.</u>

#### NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions, respectively.

## INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

#### What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

#### When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

#### Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

#### How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

### What documents must/may accompany the amendments?

#### Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

### NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

# The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- [Where originally there were 48 claims and after amendment of some claims there are 51]:
   "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers;
   claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- [Where originally there were 15 claims and after amendment of all claims there are 11]:
   "Claims 1 to 15 replaced by amended claims 1 to 11."
- [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
   "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
   "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- [Where various kinds of amendments are made]:
   "Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

#### "Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19/1)).

The statement will be published with the international application and the amended claims.

## it must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

## Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments and any accompanying statement, under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the time of filing the amendments (and any statement) with the International Bureau, also file with the International Preliminary Examining Authority a copy of such amendments (and of any statement) and, where required, a translation of such amendments for the procedure before that Authority (see Rules 55.3(a) and 62.2, first sentence). For further information, see the Notes to the demand form (PCT/IPEA/401).

## Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

## PATENT COOPERATION TREATY

# **PCT**

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

pplicant's or agent's file reference	FOR FURTHER see Notification (Form PCT/ISA/	of Transmittal of International Search Report 220) as well as, where applicable, item 5 below.
ternational application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
CT/GB 03/05308	04/12/2003	1
pplicant	047 127 2003	04/12/2002
HORT BROTHERS PLC		
This International Search Report ha according to Article 18. A copy is be	s been prepared by this International Searching Autr ling transmitted to the International Bureau.	nority and is transmitted to the applicant
This International Search Report co	nsists of a total of6sheets. ied by a copy of each prior art document cited in this	report.
. Basis of the report		
a. With regard to the language	e, the international search was carried out on the basi d, unless otherwise indicated under this item.	is of the international application in the
b. With regard to any nucleotic was carried out on the basis	de and/or amino acid sequence disclosed in the into of the sequence listing:	ernational application, the international search
contained in the inte	rnational application in written form.	
filed together with the	e international application in computer readable form.	
furnished subsequen	ntly to this Authority in written form.	
furnished subsequen	itly to this Authority in computer readble form.	
the statement that the international applicat	e subsequently furnished written sequence listing doe ion as filed has been furnished.	es not go beyond the disclosure in the
the statement that the furnished	e information recorded in computer readable form is i	dentical to the written sequence listing has been
Certain claims were	found unsearchable (See Box I).	
	s lacking (see Box II).	
With regard to the title,		
	s submitted by the applicant.	
	ablished by this Authority to read as follows:	
With regard to the abstract,		
the text is approved as	s submitted by the applicant.	
tne text has been esta within one month from	blished, according to Rule 38.2(b), by this Authority a the date of mailing of this international search report,	s it appears in Box III. The applicant may,
The figure of the <b>drawings</b> to be p	ublished with the abstract is Figure No.	2
X as suggested by the a		Non-state #
because the applicant	failed to suggest a figure.	None of the figures.
	ter characterizes the invention.	L INONE OF THE TIGURES

D)

### INTERNATIONAL SEARCH REPORT

International application No. PCT/GB 03/05308

Box I Ob	servations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
	onal Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. Clair beca	ms Nos.: ause they relate to subject matter not required to be searched by this Authority, namely:
beca	ns Nos.: luse they relate to parts of the International Application that do not comply with the prescribed requirements to such xtent that no meaningful International Search can be carried out, specifically:
beca	ns Nos.: use they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
BOX II ODS	ervations where unity of invention is lacking (Continuation of item 2 of first sheet)
This Internation	nal Searching Authority found multiple inventions in this international application, as follows:
see	additional sheet
1. X As all search	required additional search fees were timely paid by the applicant, this International Search Report covers all nable claims.
2. As all of any	searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment additional fee.
3. As only covers	y some of the required additional search fees were timely paid by the applicant, this International Search Report only those claims for which fees were paid, specifically claims Nos.:
4. No requestricted	uired additional search fees were timely paid by the applicant. Consequently, this International Search Report is ed to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Prot	The additional search fees were accompanied by the applicant's protest.  X  No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-14

Tool support comprising at least two tool carrier arms, movable relative to a fixed datum.

2. claims: 15-33

End effector for an automated riveting machine comprising a drilling tool, a sealant dispensing tool and a riveting tool.

3. claims: 34-37, 38-40

Automated riveting machine and method wherein two end effectors are positioned on opposite sides of a workpiece and in-line.

### INTERNATIONAL SEARCH REPORT

International Application No PCT/GB 03/05308

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B21J15/10 B21J15/14

B23Q39/02

B25J15/00

According to International Patent Classification (IPC) or to both national classification and IPC

#### **B. FIELDS SEARCHED**

 $\begin{array}{ccc} \text{Minimum documentation searched} & \text{(classification system followed by classification symbols)} \\ IPC 7 & B21J & B23Q & B25J \end{array}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

Citation of document with indicate	
ortaliant of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
US 4 645 112 A (COOK DANIEL D ET AL) 24 February 1987 (1987-02-24) column 3, lines 29-46 column 7, line 57 - column 9, line 28 column 11, line 9 - column 12, line 25; figures 1,6-9	1-8
US 6 108 896 A (GIGNAC JACQUES ET AL) 29 August 2000 (2000-08-29)	15-21, 23-29,
column 3, lines 20-46; figures 4,6,8	34-40 1
DE 100 27 985 A (EISENBACH B ROTOX GMBH) 3 January 2002 (2002-01-03) paragraphs [0035] - [0043]; figures 1-8	1 (
	24 February 1987 (1987-02-24) column 3, lines 29-46 column 7, line 57 - column 9, line 28 column 11, line 9 - column 12, line 25; figures 1,6-9  US 6 108 896 A (GIGNAC JACQUES ET AL) 29 August 2000 (2000-08-29)  column 3, lines 20-46; figures 4,6,8  DE 100 27 985 A (EISENBACH B ROTOX GMBH) 3 January 2002 (2002-01-03) paragraphs [0035] - [0043]; figures 1-8

X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
° Special categories of cited documents :	
"A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier document but published on or after the international filing date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.  "&" document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
3 June 2004	2 2 06. <b>2004</b>
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk	Authorized officer
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Augé, M

### **INTERNATIONAL SEARCH REPORT**

International Application No
PCT/GB 03/05308

		PCI/GB 0.	5/05306
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.
Х	US 4 557 035 A (HANINGER RUDOLF ET AL) 10 December 1985 (1985-12-10) column 1, lines 51-63 column 5, lines 36-55; figures 1,3		1
A	GB 2 192 357 A (AERPAT AG) 13 January 1988 (1988-01-13) page 2, lines 48-61; figures 1,2		1
1	DE 100 61 883 A (MUELLER THOMAS ;TDM ELEKTRONIK (DE)) 27 June 2002 (2002-06-27) paragraphs [0027] - [0031]; figure 1		1
	CH 328 511 A (AUTELCA AG) 15 March 1958 (1958-03-15) page 1, line 61 - page 3, line 20; figure		1
,	US 4 821 584 A (LEMBKE JOHN R) 18 April 1989 (1989-04-18) column 2, line 53 - column 3, line 15 column 5, lines 25-35; figure 2		30-32
	WO 99/61205 A (GEN ELECTRO MECH CORP) 2 December 1999 (1999-12-02) page 14, lines 28-31; figure 10		30
,			

2

### INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/GB 03/05308

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 4645112	Α	24-02-1987	US EP JP	4515302 0082680 58110147	A1	07-05-1985 29-06-1983 30-06-1983
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US 4821584	Α	18-04-1989	NONE			
WO 9961205	Α	02-12-1999	AU WO US	4214899 9961205 6295710	A2	13-12-1999 02-12-1999 02-10-2001